

Web_Page	Simple Scenario	SubCriterion	Comments
Alts Ratings	Billion Gallon Gap	Cost to City: Operation and Maintenance	Some of the "Cost to the City: O&M" figures seem out of whack with each other but I lack the expertise to provide any meaningful critique. I would like to see the "calculations" behind the figures explaining how the figures were developed. For example: N. Coast Water (a reservoir) costs as much as "Desal FO", "Aquifer Restoration" and "Expanded Treatment"; and, the "Loquifer" alternative which includes "Aquifer Restoration" plus many more pieces of infrastructure is significantly cheaper than just "Aquifer Restoration" alone.
Alts Ratings	640 MG Gap	Cost to City: Operation and Maintenance	Some of the "Cost to the City: O&M" figures seem out of whack with each other but I lack the expertise to provide any meaningful critique. I would like to see the "calculations" behind the figures explaining how the figures were developed. For example: N. Coast Water (a reservoir) costs as much as "Desal FO", "Aquifer Restoration" and "Expanded Treatment"; and, the "Loquifer" alternative which includes "Aquifer Restoration" plus many more pieces of infrastructure is significantly cheaper than just "Aquifer Restoration" alone.
Alts Ratings	Zero Gap	Cost to City: Operation and Maintenance	Some of the "Cost to the City: O&M" figures seem out of whack with each other but I lack the expertise to provide any meaningful critique. I would like to see the "calculations" behind the figures explaining how the figures were developed. For example: N. Coast Water (a reservoir) costs as much as "Desal FO", "Aquifer Restoration" and "Expanded Treatment"; and, the "Loquifer" alternative which includes "Aquifer Restoration" plus many more pieces of infrastructure is significantly cheaper than just "Aquifer Restoration" alone.
Alts Ratings	Zero Gap	Cost to City: Operation and Maintenance	Comments on Costs to City: OpEx * Here, actually, the scale probably SHOULD be per MG/yr, since OpEx (energy costs, wear and tear, etc.) will scale based on volume. * I simply can't believe that OpEx for a reservoir (North Coast Water) would be the same as FO Desal, and would be less than Loquifer. Makes no sense, so I down-rated it to \$850,000 (a la Ranneys).
Alts Ratings	Billion Gallon Gap	Cost to City: Upfront Costs	With regards to "Cost to the City: Upfront Costs" some of the figures seem out of whack with each other but I lack the expertise to provide any meaningful critique. I would like to see the "calculations" behind the figures explaining how the figures were developed. For example: Desal RO and Desal FO cost the same; and, the "Loquifer" alternative which includes "Aquifer Restoration" plus many more pieces of infrastructure is significantly cheaper than just "Aquifer Restoration" alone.
Alts Ratings	Billion Gallon Gap	Cost to City: Upfront Costs	I disagree that Water Nuetral Development (WND) would be a no cost to the City alternative but don't know how to determine the real cost of the following: - Administration / staffing of a WND program - Lost property tax revenue and loss of building permit revenue due to probable dramatic reduction in new development
Alts Ratings	640 MG Gap	Cost to City: Upfront Costs	With regards to "Cost to the City: Upfront Costs" some of the figures seem out of whack with each other but I lack the expertise to provide any meaningful critique. I would like to see the "calculations" behind the figures explaining how the figures were developed. For example: Desal RO and Desal FO cost the same; and, the "Loquifer" alternative which includes "Aquifer Restoration" plus many more pieces of infrastructure is significantly cheaper than just "Aquifer Restoration" alone.
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Alts Ratings	Zero Gap	Cost to City: Upfront Costs	I disagree that Water Nuetral Development (WND) would be a no cost to the City alternative but don't know how to determine the real cost of the following: - Administration / staffing of a WND program - Lost property tax revenue and loss of building permit revenue due to probable dramatic reduction in new development
Alts Ratings	640 MG Gap	Cost to City: Upfront Costs	Water Neutral development will result in a cost to the City that will be difficult to quantify. The cost of discouraging new business due to the higher cost of new construction or major remodels.
Alts Ratings	Zero Gap	Cost to City: Upfront Costs	Comments on "up front costs to City" * The "MG/yr" scale doesn't really make sense here. Rather, it should just be per MG (either of capacity [storage] or production [treatment]). * I *assume* that re-use for ag is so expensive because it includes tertiary treatment as well as additional conveyance to the North Coast ranchlands.
Alts Ratings	Zero Gap	Cost to City: Upfront Costs	Did I read somewhere that the cost info on this page was inaccurate? Desal cost, for example, was listed as \$10,750/million gallons in the EIR. Here it's listed as \$78,000. -Rick
Alts Ratings	Zero Gap	Cost to Customer: Individual Purchase	changed this because we feel developers will pass the cost on to the tenant /customer

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Alts Ratings	Zero Gap	Cost to Customer: Rates	Tried to fix a couple of these that looked wacky: * North Coast water changed to \$0.04 / 100 ga (was \$0.02) * Expanded Treatment Capacity to \$0.05 / 100 ga (was \$0.01) Neither of these made sense in context of CapEx and OpEx figures provided previously.
Alts Ratings	Billion Gallon Gap	Energy	The scale for energy intensity seems inverted. To me, a lower magnitude on the scale would seem to reflect a lower energy intensity.
Alts Ratings	Zero Gap	Energy	Comments about Energy (General): I've come around to the notion that we should consider scrapping this criterion and replacing it with "non-operational carbon footprint". That is, assess the carbon-impact of the solution separate from its operational (energy) requirements. Energy costs (and consequent carbon impacts - carbon taxes, etc.) are captured in Operating Expenses.
Alts Ratings	Zero Gap	Flexibility	Comments on Flexibility: * Another asymmetrical scale - "does not increase" is not mid-point. Again, same for all so ignoring this for this exercise. * I don't understand why Water Neutral "somewhat increases" flexibility" if other demand reduction solutions (WaterSmart and Landscaping) don't. I changed Water Neutral to "does not increase".
Alts Ratings	Zero Gap	Freshwater and Riparian Health	If one assumes under the Zero Gap scenario, no alternatives would be needed nor implemented other than the very low cost / good ideas of "WaterSmart" and "Landscaping, Capture, Reuse" all other alternatives would not be implemented and therefore the result would be everything staying "About as it is now". Accordingly, I changed all alts to reflect this result.
Alts Ratings	Billion Gallon Gap	Groundwater Resources	With regards to Groundwater Resources, I fail to see how the "North Coast Water" Alternative would "Depletes Resource" so I changed it to "Does not affect".
Alts Ratings	640 MG Gap	Groundwater Resources	With regards to Groundwater Resources, I fail to see how the "North Coast Water" Alternative would "Depletes Resource" so I changed it to "Does not affect".
Alts Ratings	Zero Gap	Groundwater Resources	If one assumes under the Zero Gap scenario, no alternatives would be needed nor implemented other than the very low cost / good ideas of "WaterSmart" and "Landscaping, Capture, Reuse" all other alternatives would not be implemented and would therefore have no effect on Groundwater Resources. Accordingly, I rated them so.
Alts Ratings	Zero Gap	Groundwater Resources	Comments on Groundwater Resources. * I am consciously ignoring the construct that any conservation measure "allows restoration" just as much as any water-manufacturing measure (desal) does, and therefore leaving WaterSmart, Landscaping, Water Neutral, etc. as they are (for now). * Changed North Coast water from "depletes" to "does not affect", since we are just storing the same water that we are currently using from those streams, within our rights and DFW provisions. I don't see the change.
Alts Ratings	Billion Gallon Gap	Infrastructure Resilience	With regards to Infrastructure Resilience, "The Loquifer Alternative" which includes aquifer restoration as part of its program should be rated the same as "Aquifer Restoration" so I changed The Loquifer Alternative to match the "Many moderately well" rating of "Aquifer Restoration"
Alts Ratings	Zero Gap	Infrastructure Resilience	Comments on "infrastructure resilience" * Down-rated Desal (RO & FO) due to high reliance on power (no water if power goes out). *
Alts Ratings	Billion Gallon Gap	Legal Feasibility	Regarding "Legal Feasibility" I am no lawyer so I offer my uninformed opinions as follows: Most alternatives would rate "Yes but some ambiguities" so I changed them to be so. However, since "The Loquifer Alternative" is similar to the "Aquifer Restoration" alternative in that it involves transferring water across District boundaries and will require some modification of existing water rights and new agreements to be negotiated, I changed "The Loquifer Alternative" to be the same as "Aquifer Restoration" i.e. "Difficult to acquire". Accordingly, I rated them both 'Difficult to acquire'.
Alts Ratings	640 MG Gap	Legal Feasibility	Regarding "Legal Feasibility" I am no lawyer so I offer my uninformed opinions as follows: I see no reason why "WaterSmart" wouldn't be an 'Unambiguous yes', so I changed it to be so. Since the passage of time is not considered for this criterion, I opine "Desal FO", "Landscaping, Capture, Reuse", "Water Neutral Development", "Water Reuse (Potable)", "North Coast Water", "Expanded Treatment Capacity", "Ranney Collectors on SLR", "Reuse for Agriculture" and "Desal RO" wouldn't be considered 'Yes but some ambiguities', so I changed them all to be so. Lastly, since both "Aquifer Restoration" and "The Loquifer Alternative" involve transferring water across District boundaries, both will require some modification of existing water rights and new agreements to be negotiated, I rated them both 'Difficult to acquire'.
Alts Ratings	Zero Gap	Legal Feasibility	These comments relate to Legal Feasibility: * Changed WaterSmart, Landscaping, Water Neutral, and Expanded Treatment to "unambiguous yes", since they're in use in the State of CA and have been for some time, with no legal challenges of which I'm aware. * Changed both FO and RO Desal, water reuse (potable), and re-use for ag to "some ambiguity" out of deference to needed environmental approvals * Changed North Coast Water, Ranneys, Loquifer to "some ambiguity" due to need to confirm that our water rights work here * Changed
Alts Ratings	Billion Gallon Gap	Local Economy	My sense is most of the alternatives would result in a positive effect on the local economy as the initial construction effort would utilize local labor forces, long term O&M would utilize local labor and any alternative that provides a more robust, reliable and plentiful water supply will be good for business in general as businesses will be able expand and development will be allowed to occur without fear that there will be no water or not enough water. Accordingly, I changed "Desal FO" "Aquifer Restoration" "Water Reuse (Potable)" "The Loquifer Alternative" and "Reuse for Agriculture" to "Slight positive".
Alts Ratings	640 MG Gap	Local Economy	My sense is most of the alternatives would result in a positive effect on the local economy as the initial construction effort would utilize local labor forces, long term O&M would utilize local labor and any alternative that provides a more robust, reliable and plentiful water supply will be good for business in general as businesses will be able expand and development will be allowed to occur without fear that there will be no water or not enough water. Accordingly, I changed "Desal FO" "Aquifer Restoration" "Water Reuse (Potable)" "Expanded Treatment Capacity" "Ranney Collectors on SLR" "The Loquifer Alternative" "Reuse for Agriculture" and "Desal RO" to "Slight positive".

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Alts Ratings	Zero Gap	Local Economy	If one assumes under the Zero Gap scenario, no alternatives would be needed nor implemented other than the very low cost / good ideas of "WaterSmart" and "Landscaping, Capture, Reuse" all other alternatives would not be implemented and would therefore have no effect on the local economy. Accordingly, I rated them so.
Alts Ratings	640 MG Gap	Local Economy	Whether through conservation or new supply, reducing the gap will benefit the local economy
Alts Ratings	Billion Gallon Gap	Local Economy	To be clear, I'd like this to say "more local jobs" or "fewer local jobs." As written, there's a chance someone might think it means more job growth or less/slower job growth, rather than (as I think it means) fewer jobs. Just a thought; maybe picky, but let's be clear.
Alts Ratings	Zero Gap	Local Economy	I am confused about why the staff ratings for impacts to the local economy show a negative effect for local jobs. Just about any project, even if awarded to a firm from outside the area, is going to have the potential for creating some local jobs for sub contractors, City staffing, or the hospitality industry. How do 10 of the projects actually hurt local employment?
Alts Ratings	640 MG Gap	Local Economy	Under this scenario the lack of water is already affecting local jobs so by filling the gap you are addressing that issue. Also don't undersatnd the positive affect about north coast storage
Alts Ratings	Zero Gap	Local Economy	Comments on Local Economy (Jobs Impacts): * Changed Desal (FO & RO) to "slight negative" - couple of local jobs created both during construction and during operation; preponderance of funds spent leave the county. * Same logic for Aquifer Restoration and Loquifer; some local jobs during construction, but not permanent. Bulk of money travels out. * Landscaping - changed to "positive" - all of this work would/could be done by local folks. * Water Neutral - changed to 'slight negative' on the presumption that it would make new construction more expensive and therefore slow projects in general and stop some that would become infeasible. * Water re-use potable, Ranneys, reuse for ag & Expanded treatment - same logic as for Desal - "slight negative" * North Coast Water - no effect - would seem that at least some of the money would stay here.
Alts Ratings	Zero Gap	Local Economy	It is not clear to me why under employment impacts all but two of the projects have a negative impact on jobs. The info button says this category is a synthesis of jobs generated by the project, but the impact of water supply, etc. on local employment. How can all of these projects have a negative impact? they all should have a positive impact even if of various degrees.
Alts Ratings	Zero Gap	Marine Ecosystem Health	Marine Ecosystem * Changed both Desal to "may harm", because they (1) draw sea water and (2) create discharge products.
Welcome	Billion Gallon Gap	N/A	For future reference it would have been more efficient if the 12 emailed files of proposals were labeled with the same names used in the ratings headings.
Weights	640 MG Gap	N/A	With a larger gap, money matters less than providing water.
Weights	640 MG Gap	N/A	Again - technical and legal feasibility are more important than more malleable factors like regulatory and political concerns. If the drought persists, regulators will be forced to work with local utilities on proposals once considered impossible
Weights	Billion Gallon Gap	N/A	Here are the general values I'm reflecting in my 1000MGY weightings/ratings: "ç Available supply less often sufficient; storage augmentation / management changes needed to a greater degree than with 650MGY o Need greater storage buffer because must capture flows in narrower time window "ç Willing to spend what it takes to augment available supplies; less price-sensitive to those budgetary items "" focus is on productivity (effectiveness) more than cost-effectiveness o Investments that provide operational flexibility would be beneficial (enhances reliability of the system, internally) o Can only afford minimal improvements to existing infrastructure, because of need to focus on supply enhancements o Maintain substantial dry powder in case need to further augment supply "ç Want to maximize conservation, including landscape swaps o Make sure folks can afford to do it o Rates will be (much?) higher, so may starve out conservation measures that require investment "ç Want rate structure to reinforce maximized conservation, esp. in landscape and commercial accounts "ç Not able to work with others, because need to focus on SCWD clients first o To the extent possible, would want to help others, but not a primary focus "ç Make sure City can afford the investments "ç Make sure Community Rates are reasonable (relates to City affordability)
Weights	640 MG Gap	N/A	Here are the general values I'm reflecting in my 650MGY weightings/ratings: "ç Supply often, but not always, sufficient; storage augmentation / management changes needed "ç Investments that provide operational flexibility would be beneficial (enhances reliability of the system, internally) o Can only afford modest improvements to existing infrastructure, because of need to focus on supply enhancements o Maintain moderate dry powder in case need to further augment supply "ç Want to maximize conservation, including landscape swaps o Make sure folks can afford to do it "ç Want rate structure to reinforce maximized conservation, esp. in landscape and commercial accounts "ç Environmental considerations begin to wane a bit "ç Less able to work with others, because need to focus on SCWD clients first o To the extent possible, would want to help others, but not a primary focus "ç Make sure City can afford the investments "ç Make sure Community Rates are reasonable (relates to City affordability)
Weights	Zero Gap	N/A	Here are my general comments about the values I'm reflecting in my Zero Gap weightings/ratings: "ç Relatively few large-scale investments, because supply already sufficient. o Relatively more concerned about project costs and cost-effectiveness, because spending relatively less here and more on infrastructure resilience, reliability and flexibility "ç Want to maximize conservation, including landscape swaps o Make sure folks can afford to do it "ç Want rate structure to reinforce maximized conservation, esp. in landscape and commercial accounts "ç Want to ensure that the system we have is reliable and flexible, since will have less redundancy, by dint of fewer investments "ç Can "afford" to focus on environmental and community well being concerns (separate from local jobs "" ambience and such) "ç Can opt to invest in projects that help others, and we would gain reliability by partnering with others (since we aren't doing much supply development of our own)

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Welcome	Billion Gallon Gap	N/A	(Don't care if you figure out who I am.) What I see at the end of doing this exercise is that as the gap between supply and demand gets greater, I care more about yield and effectiveness and reliability, etc. of each project. If we don't need much from a new water source, we can afford to not care so much about how much a project produces or how much we can depend upon it or when we can depend upon it, etc. This might be common sense, but the exercise made it clear to me. I know we are going here on very rough estimates from staff about how each of these alternatives should be scored on how they meet various criteria, but we shouldn't be surprised that the real fight (or, because we are so civilized, the real discussion), both within our group and among the public, will be about which scenario is the correct one; or to put it more directly, the question of what our gap is, which, in turn, depends upon what kind of and what level of water use we want to support in our community. The membership of the WSAC is diverse and representative enough to make a recommendation about that, once we get more information from the Real Deal, but the question will probably need to be taken back to the City Council, in a clearer way than in the past and with more information about the quantitative impacts and implications of various choices along a spectrum of water demand. I think our group can play a key role in guiding that process, even if we don't have the final say in the outcome.
Weights	Zero Gap	N/A	What is money if you don't have water? We all are in this together and the notion that some people will "bear the cost more than others" is dubious at best. Of course, it should be the policy of the water department to always make rates and costs as equitable as possible to ratepayers. Determining what "equitable" means, however, is not easy but is an important concept that warrants frequent attention.
Weights	Zero Gap	N/A	All of these areas are important to those in the community but whatever solution(s) we pursue need to be technically feasible and legal. Clearly. Regulatory and political feasibility are malleable and dynamic which makes them important but not as important as actually being able to do something and whether what you are doing is legal.
Weights	Zero Gap	N/A	I'm not sure anyone believes we face a zero gap. Differences in opinion do exist as to the extent of the problem, but the zero gap scenario is fanciful at best. Debating a 300-400 million gallons per year scenario would be more worthwhile.
Weights	Zero Gap	N/A	Regional water stability is very important but like us, our neighbors in the various districts, agencies, and utilities surrounding Santa Cruz, must grapple with their distinct political differences before the optimum solution can be crafted. Whether it be an enhanced conservation ethic, metering wells, or improving bureaucratic efficiency, all utility providers in our watershed must look inward and ask what actions can be taken to upgrade operations. Doing so will make the development of a regional solution much easier.
Weights	Zero Gap	N/A	Its not just about jobs, local economy should also be about the cost of doing business how it specifically impacts the different business sectors (construction,real estate,hospitality etc)
Alts Ratings	Billion Gallon Gap	Political Feasibility	Regarding Political Feasibility under the "Billion Gallon Gap" scenario, my constituency would find the low cost / low risk WaterSmart alternative "Acceptable now". Because of the general risk associated with using unproven technology my constituency would find "Desal FO" Alternative "Acceptable in 10 years". Because of the legal and probable regulatory difficulties as well as the risk of transferring water out of SCWD's control, my constituency would rate "Aquifer Restoration" and "The Loquifer Alternative" less attractive than other alternatives, so I rated them both "Acceptable in 10 years". Because of the probable high cost to individual homeowners and low effectiveness, my constituency would probably rate "Landscaping, Capture, Reuse" less attractive than other alternatives, so I rated it "Acceptable in 10 years". Because "Water Neutral Development" (WND) would result in raising the cost of housing and general construction even higher than it already is, would result in depressing future development and depressing the local economy on many levels, my constituency would rate WND "Likely never" acceptable. Regarding all other alternatives, my constituency would rate them "Acceptable now".
Alts Ratings	640 MG Gap	Political Feasibility	Regarding Political Feasibility under the "650 MG Shortfall" scenario, my constituency would find the low cost / low risk WaterSmart alternative "Acceptable now". Because of the general risk associated with using unproven technology my constituency would find "Desal FO" Alternative "Acceptable in 10 years". Because of the legal and probable regulatory difficulties as well as the risk of transferring water out of SCWD's control, my constituency would rate "Aquifer Restoration" and "The Loquifer Alternative" less attractive than other alternatives, so I rated them both "Acceptable in 10 years". Because of the probable high cost to individual homeowners and low effectiveness, my constituency would probably rate "Landscaping, Capture, Reuse" less attractive than other alternatives, so I rated it "Acceptable in 10 years". Because "Water Neutral Development" (WND) would result in raising the cost of housing and general construction even higher than it already is, would result in depressing future development and depressing the local economy on many levels, my constituency would rate WND "Likely never" acceptable. Regarding all other alternatives, my constituency would rate them "Acceptable now".
Alts Ratings	Zero Gap	Political Feasibility	Regarding Political Feasibility under the "zero gap" scenario, it is my opinion our community would be unwilling to spend any significant money on any alternatives but would probably go along with low cost alternatives that seem like a good idea. Accordingly, I rated the relatively low cost alternatives "WaterSmart" "Landscaping Capture & Reuse" with the "Enthusiasm now" rating and all other alternatives as "Likely never"
Alts Ratings	Billion Gallon Gap	Political Feasibility	With a billion gallon gap, political considerations change. The gap, however, has to be an agreed upon number.
Alts Ratings	Billion Gallon Gap	Political Feasibility	Comments on Political Feasibility (1BGY) * Moved Water Neutral to "acceptable now" - under such an extreme circumstance, I think that the town would embrace the approach. * Moved Water Re-use to 5 years - under pressure of bigger shortfall would be interesting to see how FO and Re-use compete in the marketplace of ideas.
Alts Ratings	640 MG Gap	Political Feasibility	Comments on Political Feasibility (650 MG): * Rated Desal FO at 5 years - increased need for water and presumption that it's a lower-energy approach make it more palatable than was the case at Zero Gap. * Rated Water Neutral Development at 2 years - increased need for conservation makes it more politically palatable than in the Zero Gap case.

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Alts Ratings	Zero Gap	Political Feasibility	Political Feasibility (Zero Gap): * Rated Desal FO at 10 years out due to lower energy requirements than RO. * Rated Desal RO at 20 years out due to higher energy requirements leading to resistance. * DPR at 10 years out due to concerns about emerging contaminants. * Water Neutral development at 5 years out due to concerns about economic impacts. * All others acceptable or enthusiasm now
Alts Ratings	Billion Gallon Gap	Regional Water Stability	I fail to see how "Water Smart", "N. Coast Water", "Expanded Treatment Capacity", "Ranney Collectors on SLR", or "Reuse for Agriculture" would benefit any other jurisdiction besides our own so I changed them all to SC only...
Alts Ratings	640 MG Gap	Regional Water Stability	I fail to see how "Water Smart", "N. Coast Water", "Expanded Treatment Capacity", "Ranney Collectors on SLR", or "Reuse for Agriculture" would benefit any other jurisdiction besides our own so I changed them all to SC only...
Alts Ratings	Zero Gap	Regional Water Stability	I fail to see how "Water Smart", "N. Coast Water", "Expanded Treatment Capacity", "Ranney Collectors on SLR", or "Reuse for Agriculture" would benefit any other jurisdiction besides our own so I changed them all to SC only...
Alts Ratings	Zero Gap	Regional Water Stability	why do the Ranney collectors help other jurisdictions ? and couldnt Desal be county wide?
Alts Ratings	640 MG Gap	Regional Water Stability	Comments on Regional Water Stability (650 MG): * Leaving both Desal as 2 jurisdictions, though that assumes facts not in evidence - that SoqCWD would collaborate. * WaterSmart - affects SC water only - it's an SCWD only program. * North Coast Water - affects SC water only, as I read and understand the proposal - we are using our rights on Liddell. * Expanded Treatment - affects SC water only, as I read and understand the proposal - we are increasing our take on SLR and using (or perhaps storing) that water. * Ranneys - same as for expanded treatment (to an extent they are twinned)
Alts Ratings	Zero Gap	Regional Water Stability	Comments on Regional Water Stability: * Changed North Coast Water to SC Water Only. I don't see who else it benefits * Same with WaterSmart - Only benefits SCWD. * Same with Reuse for Ag - only benefits SCWD (just like potable reuse) * Same with Ranneys on SLR - only benefits SCWD. * Same with Expanded Treatment - only benefits SCWD. * I left both Desal as 2 Jurisdictions, though that assumes facts not in evidence (that we would re-boot our SCWD/SoqCWD collaboration)
Alts Ratings	Billion Gallon Gap	Regulatory Feasibility	Not sure why "Reuse for Agriculture" would require new regulations - isn't this alternative already in use elsewhere? According to the documents submitted by Ripley, use of recycled water is embraced / required by regulatory authorities. Accordingly, I upgraded this alt to be the same as "Ranney Collectors" i.e. "Slow but relatively sure". It is unclear what the difference is between "slow but relatively sure" and "very slow - no regulatory changes". Since the next tick on the scale is ten years, I am guessing slow means 2 years and v slow means 5 years. Accordingly, my guess is that since "north coast water" (a reservoir) and ranney collectors are both widely used, they would both be "slow but relatively sure". So I changed "north coast water" to match "Ranney Collectors" and downgraded the Lochquifer alternative compared to the Ranney alternative as the Lochquifer alt includes Ranney collectors and has the added complexity of water transfers which I assume involve water rights issues which jst has to take longer. So I changed Loquifer to 'Up to 10 years - new reg' because it involves moving water from one jurisdiction to another and will require new water rights be obtained - no guarantees that process would take any less than 10 years, and may actually turnout to be never. Similarly, I changed "Aquifer Restoration" to 'Up to 10 years - new reg'
Alts Ratings	640 MG Gap	Regulatory Feasibility	Not sure why Reuse for Agriculture would require new regulations - isn't this alternative already in use elsewhere? According to the documents submitted by Ripley, use of recycled water is embraced / required by regulatory authorities. Accordingly, I upgraded this alt to be the same as Ranney Collectors and North Coast Water. It is unclear what the difference is between "slow but relatively sure" and "very slow - no regulatory changes". Since the next tick on the scale is ten years, I am guessing slow means 2 years and v slow means 5 years. Accordingly, my guess is since north coast water (a reservoir) and ranney collectors are both widely used, they would both be slow but relatively sure. I downgraded the Lochquifer alternative compared to the Ranney alternative as the Lochquifer alt includes Ranney collectors and has the added complexity of water transfers which I assume involve water rights issues. Just has to take longer so I changed Loquifer to '10 years - new reg' because it involves moving water from one jurisdiction to another and will require new water rights be obtained - no guarantees that process would take any less than 10 years, and may actually turnout to be never.
Alts Ratings	Zero Gap	Regulatory Feasibility	Changed Loquifer to 10 years - new reg because it involves moving water from one jurisdiction to another and will require new water rights be obtained - no guarantees that process would take any less than 10 years, and may actually turnout to be never.
Alts Ratings	Zero Gap	Regulatory Feasibility	Not sure why Reuse for Agriculture would require new regulations - isn't this alternative already in use elsewhere? According to the documents submitted by Ripley, use of recycled water is embraced / required by regulatory authorities. Accordingly, I upgraded this alt to be the same as Ranney Collectors and North Coast Water.
Alts Ratings	Zero Gap	Regulatory Feasibility	I downgraded the Lochquifer alternative compared to the Ranney alternative as the Lochquifer alt includes Ranney collectors and has the added complexity of water transfers which I assume involve water rights issues. Just has to take longer...

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Alts Ratings	Zero Gap	Regulatory Feasibility	These comments relate to Regulatory Feasibility: * Changed Reuse for Ag to "slow but sure" - it's in use in Pajaro already, so just not clear why it would take longer for agencies to approve for SCWD. * Changed North Coast water to "slow but sure" to match Ranneys and Loquifer; the regulatory issues would seem to be the same (and, in fact, perhaps easier given our pre 1914 right to Liddell).
Alts Ratings	640 MG Gap	Reliable Supply	Comments on Reliability (650 MGY): * I have chosen to disagree about the effect of demand reduction on system reliability. Given that this exercise is in the context of a given "gap", we are assessing the solution's ability to operate within that gap. While demand reduction doesn't improve reliability, I don't agree that it makes it worse and have set these solutions as "no change" as a result.
Alts Ratings	Zero Gap	Reliable Supply	Comments on Reliable Supply: * Scale seems imbalanced - "no change" is not the middle. Applies to all of them, so I think it washes out for now. * Loquifer is a tough one here - I believe that the provided rating is getting at the issue of Loch management and the resulting buffer we have there (cf. Aquifer Restoration, which rates relatively highly). Hmmm
Alts Ratings	Zero Gap	Scalability	Comments on Scalability: * Need to know more about productive capacity of Expanded Treatment and Ranneys. I had thought that each could do more than 1MGD (300MGY gap), and I have changed them both to 650MGY gap as a result for the sake of this exercise.
Alts Ratings	Billion Gallon Gap	Technical Feasibility	Regarding "Technical Feasibility" I changed the rating for "North Coast Water" to Widely Used as this alternative is basically building a dam to create a reservoir, a technology that has been used around the world for perhaps thousands of years.
Alts Ratings	640 MG Gap	Technical Feasibility	Regarding "Technical Feasibility" I changed the rating for "North Coast Water" to Widely Used as this alternative is basically building a dam to create a reservoir, a technology that has been used around the world for perhaps thousands of years.
Alts Ratings	Zero Gap	Technical Feasibility	These comments relate to the provided ratings under "technical feasibility" * Changed landscaping, capture, re-use from "Demonstrated in Field" to "Widely Used", for what I believe are the obvious reasons: it is widely used, worldwide. * Changed Potable Re-use to "Demonstrated in Field" from "Widely used" again for what I hope are obvious reasons: it's not "widely used" in comparable settings. * Changed Loquifer from "widely used" to "promising in 3-5 years" since no one is now doing Loquifer (so how can it be widely used?). * Changed North Coast Water to "widely used", since reservoirs are widely used.
Alts Ratings	Zero Gap	Yield	Comments on "Yield" * Improved Water Neutral Development so that it offsets our growth in demand due to GP growth (300 MGY, estimated) * Per my previous comment on Scalability regarding Expanded Treatment and Ranneys, changed to 650 MGY, pending further discussion.